FastDB - Fast Pairwise Comparison of Sequences Release 5.4

Results file us-08-816-977-48.res made by bobryen on Tue 18 Jun 102 12:48:52-PDT.

Query sequence being compared:US-08-816-977-48 (1-2085) Number of sequences searched: 34 Number of scores above cutoff: 34 Results of the initial comparison of US-08-816-977-48 (1-2085) with:

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PARAMETERS	K-tuple Joining penalty Window size
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	Similarity matrix Mismatch penalty Gar Denalty GG ize penalty CU f score Randomization group

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SEARCH STATISTICS

Standard Deviation 545.42	Total Elapsed
Median 11	
Mean 291	CPU 00:00:00
Scores:	Times:

Number of residues: 18356
Number of sequences searched: 34
Number of scores above cutoff: 34

The scores below are sorted by initial score. Significance is calculated based on initial score.

A 100% identical sequence to the query sequence was found:

Sequence Name Description Length Score Store Sig. Frame		Frame	
Init. Opt. quence Name Description Length Score Score		Sig.	1 1 1 1
quence Name Description Length Score	opt.	Score	
quence Name Description Length	Init.	Score	
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The list of other best scores is: Sequence Name	1.	. US-08-816-977-48	977-48	Sequence 48,		Application	2085	2085	2085	3.29	0
Init. Opt. Init. In	The 1	of		is							
#### 2 standard deviations above mean #### US-08-816-977-46 Sequence 46, Application 2073 1615 1703 #### 1 standard deviation above mean #### US-08-816-977-32 Sequence 31, Application 2136 1193 1969 US-08-816-977-10 Sequence 31, Application 2136 1193 1969 US-08-816-977-10 Sequence 10, Application 1235 839 US-08-816-977-24 Sequence 54, Application US-08-816-977-24 Sequence 24, Application US-08-816-977-2 Sequence 26, Application US-08-816-977-2 Sequence 27, Application US-08-816-977-2 Sequence 27, Application US-08-816-977-3 Sequence 27, Application US-08-816-977-3 Sequence 28, Application US-08-816-977-3 Sequence 28, Application US-08-816-977-3 Sequence 28, Application US-08-816-977-3 Sequence 28, Application US-08-816-977-4 Sequence 29, Application US-08-816-977-1 Sequence 29, Application US-08-816-97	Seque		Desc	ription			Length	Init. Score			Frame
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US-08-816-977-3 Sequence 3, Application US 267 10 86 -0. US-08-816-977-22 Sequence 22, Application 294 10 97 -0. US-08-816-977-15 Sequence 24, Application 29 9 13 -0. US-08-816-977-15 Sequence 15, Application 29 9 14 -0. US-08-816-977-42 Sequence 17, Application 29 9 15 -0. US-08-816-977-42 Sequence 14, Application 26 8 11 -0. US-08-816-977-15 Sequence 15, Application 29 8 13 -0. US-08-816-977-15 Sequence 15, Application 29 8 13 -0. US-08-816-977-15 Sequence 15, Application 29 8 13 -0. US-08-816-977-15 Sequence 17, Application 30 8 13 -0. US-08-816-977-18 Sequence 18, Application 30 8 13 -0. US-08-816-977-18 Sequence 18, Application 30 8 13 -0. US-08-816-977-18 Sequence 18, Application 30 8 13 -0.	18.	US-08-816	0	Sequence	0, Ap	plication	26	10	15	-0.52	0
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US-08-816-977-29 Sequence 29, Application 28 9 13 -0. US-08-816-977-16 Sequence 16, Application 29 9 14 -0. US-08-816-977-12 Sequence 12, Application 29 9 15 -0. US-08-816-977-12 Sequence 12, Application 29 9 15 -0. US-08-816-977-14 Sequence 14, Application 26 8 13 -0. US-08-816-977-15 Sequence 15, Application 29 8 13 -0. US-08-816-977-15 Sequence 15, Application 29 8 13 -0. US-08-816-977-15 Sequence 17, Application 29 8 14 -0. US-08-816-977-18 Sequence 18, Application 30 8 13 -0. US-08-816-977-18 Sequence 18, Application 20 9 14 -0. US-08-816-977-18 Sequence 18, Application 20 12 -0.	50.	US-08-816	977-22	Sequence	2, Ap	plication	294	10	97	-0.52	0
US-08-816-977-16 Sequence 16, Application 29 9 14 -0. US-08-816-977-13 Sequence 13, Application 29 9 12 -0. US-08-816-977-42 Sequence 12, Application 26 8 11 -0. US-08-816-977-45 Sequence 14, Application 28 8 13 -0. US-08-816-977-15 Sequence 15, Application 29 8 13 -0. US-08-816-977-15 Sequence 15, Application 29 8 14 -0. US-08-816-977-17 Sequence 17, Application 30 8 13 -0. US-08-816-977-44 Sequence 18, Application 30 8 13 -0. US-08-816-977-48 Sequence 18, Application 30 8 13 -0.	21.	US-08-816	977-29			plication	28	6	13		0
US-08-816-977-13 Sequence 13, Application 29 9 12 -0. US-08-816-977-12 Sequence 12, Application 29 9 15 -0. US-08-816-977-14 Sequence 14, Application 26 8 11 -0. US-08-816-977-14 Sequence 14, Application 28 8 13 -0. US-08-816-977-15 Sequence 15, Application 29 8 13 -0. US-08-816-977-17 Sequence 17, Application 29 8 14 -0. US-08-816-977-18 Sequence 17, Application 30 8 13 -0. US-08-816-977-18 Sequence 18, Application 30 8 14 -0. US-08-816-977-18 Sequence 18, Application 26 7 12 -0.	22.	US-08-816	977-16			plication	29	6	14		0
US-08-816-977-12 Sequence 12, Application 29 9 15 -0. US-08-816-977-42 Sequence 42, Application 26 8 11 -0. US-08-816-977-14 Sequence 14, Application 29 8 13 -0. US-08-816-977-15 Sequence 31, Application 29 8 13 -0. US-08-816-977-15 Sequence 15, Application 29 8 14 -0. US-08-816-977-14 Sequence 17, Application 30 8 13 -0. US-08-816-977-18 Sequence 18, Application 30 8 13 -0. US-08-816-977-18 Sequence 18, Application 26 7 12 -0.	23.	US-08-816	977-13			plication	29	6	12		0
US-08-816-977-42 Sequence 42, Application 26 8 11 -0. US-08-816-977-14 Sequence 14, Application 28 8 13 -0. US-08-816-977-15 Sequence 31, Application 29 8 13 -0. US-08-816-977-17 Sequence 15, Application 29 8 14 -0. US-08-816-977-18 Sequence 17, Application 30 8 13 -0. US-08-816-977-18 Sequence 18, Application 26 7 12 -0.	7.	US-08-816	977-12		_	plication	29	6	15		0
US-08-816-977-14 Sequence 14, Application 28 8 13 -0. US-08-816-977-31 Sequence 31, Application 29 8 13 -0. US-08-816-977-15 Sequence 15, Application 29 8 14 -0. US-08-816-977-44 Sequence 44, Application 30 8 13 -0. US-08-816-977-18 Sequence 18, Application 26 7 12 -0.	25.	US-08-816	977-42		_	plication	26	œ	Ξ		0
US-08-816-977-31 Sequence 31, Application 29 8 13 -0. US-08-816-977-15 Sequence 15, Application 29 8 14 -0. US-08-816-977-17 Sequence 17, Application 30 8 13 -0. US-08-816-977-18 Sequence 44, Application 26 7 12 -0.	26.	US-08-816	977-14			plication	28	œ	13		0
US-08-816-977-15 Sequence 15, Application 29 8 14 -0. US-08-816-977-17 Sequence 17, Application 30 8 13 -0. US-08-816-977-44 Sequence 44, Application 32 8 14 -0. US-08-816-977-18 Sequence 18, Application 26 7 12 -0.	27.	-816	77	Sequence		plication	29	80	13		0
. US-08-816-977-17 Sequence 17, Application 30 8 13 -0. US-08-816-977-44 Sequence 44, Application 32 8 14 -0. US-08-816-977-18 Sequence 18, Application 26 7 12 -0.	28.	-816	977-15			plication	29	80	14		0
. US-08-816-977-44 Sequence 44, Application 32 8 14 -0.5 . US-08-816-977-18 Sequence 18, Application 26 7 12 -0.5	29.	-816	977-17			plication	30	80	13		0
. US-08-816-977-18 Sequence 18, Application 26 7 12 -0.5	30.	-816	4			plication	32	80	14	S.	0
	31.	-816-	977	Sequence		plication	26	7	12	'n.	0

22. US-08-816-977-48 (1-2085) US-08-816-977-16 Sequence 16, Application US/08816977 Initial Score = 9 Optimized Score = 14 Significance = -0.52 Residue Identity = 48% Matches = 14 Mismatches = 15 Gaps = 0 Conservative Substitutions = 0

23. US-08-816-977-48 (1-2085) US-08-816-977-13 Sequence 13, Application US/08816977 Initial Score \bullet 9 Optimized Score \bullet 12 Significance \bullet 0.52 Residue Identity \bullet 41% Matches \bullet 12 Mismatches \bullet 17 Gaps \bullet 0 Conservative Substitutions \bullet 0

24. US-08-816-977-48 (1-2085) US-08-816-977-12 Sequence 12, Application US/08816977

```
8 Optimized Score - 14 Significance - 0.52
48% Matches - 14 Mismatches - 15
0 Conservative Substitutions - 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 7 Optimized Score = 12 Significance = -0.52
46% Matches = 12 Mismatches = 14
0 Conservative Substitutions = 0
9 Optimized Score - 15 Significance - 0.52
51% Matches - 15 Mismatches - 14
0 Conservative Substitutions - 0
                                                                                                                                                                                                              8 Optimized Score = 13 Significance --0.52
46% Matches - 13 Mismatches - 15
0 Conservative Substitutions - 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Initial Score = 8 Optimized Score = 13 Significance = -0.52 Residue Identity = 43% Matches = 13 Mismatches = 17 Gaps = 0 Conservative Substitutions = 0
                                                            31. US-08-816-977-48 (1-2085)
US-08-816-977-18 Sequence 18, Application US/08816977
                                                                                                                                                              26. US-08-816-977-48 (1-2085)
US-08-816-977-14 Sequence 14, Application US/08816977
                                                                                                                                                                                                                                                                                                                                                                                  28. US-08-816-977-48 (1-2085)
US-08-816-977-15 Sequence 15, Application US/08816977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                29. US-08-816-977-48 (1-2085)
US-08-816-977-17 Sequence 17, Application US/08816977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Initial Score -
Residue Identity -
Gaps -
                                                                                                                                                                                                                  Initial Score Residue Identity - Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                    Initial Score -
Residue Identity -
Gaps -
 Initial Score Residue Identity Gaps
```

```
> 0 < 0 | 0 IntelliGenetics > 0 <
```

FastDB - Fast Pairwise Comparison of Sequences Release 5.4

Results file us-08-816-977-48-inv.res made by bobryen on Tue 18 Jun 102 12:49:40-PDT.

Query sequence being compared: US-08-816-977-48' (1-2085) Number of sequences searched: 34 Number of scores above cutoff: 34

Results of the initial comparison of US-08-816-977-48' (1-2085) with:

o turne	:																*		20 22 3
tomolo																			117
	2										*								15
								*					*						12-
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04.00.se																			-25-
File : 6080400.seq %																			-2-2-
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50 500 500
K-tuple Joining penalty Window size
Unitary 10 5.00 3.33 1
Similarity matrix Mismatch penalty Gg. menalty GG lize penalty Cu .f score Randomization group

PARAMETERS

SEARCH STATISTICS

Standard Deviation 3.37	
Median 13	
Mean 11	
Scores:	

CPU 00:00:00.91 Times:

Total Elapsed 00:00:00:00

18356 34 34 Number of residues: Number of sequences searched: Number of scores above cutoff: The scores below are sorted by initial score. Significance is calculated based on initial score.

A 100% identical sequence to the query sequence was not found.

The list of best scores is:

1 1 1	::					;
•	E ***	deviations		***		
÷	US-08-816-977-17 Sequence	17, Application	9	22 22	3.27	0
r	2 3 2 2	and deviation	above mean		200	0
•	***	dard deviation	23 from mean *1	+ *	Ċ	>
~	-816-977-36 Segue	36 Application		14 274		0
	C-08-816-977-46 C	trada 's	2000	1		0
• 1	C 0#-1/6-0TB-00 C	o, Appiled	2013	•	•	9
'n	-08-816-977-48	, Applica	2085	46	•	0
9	-08-816-977-32	'n	2127	48	•	0
7	-08-816-977-34		2136	48		0
8	-1 S	Ap	945			0
6	-08-816-977-20	20, Application	696			0
10.	-08-816-977-9 Sequence	9	1241			0
11.	-08-816-977-19	٠.	29			0
12.	8-08-816-977-16		29	7		0
13.	-08-816-977-45	45, Application	32	7		0
14.	-08-816-977-30		32	7	•	0
15.	S-08-816-977-5 Sequence	¥	954	7	•	0
16.	S-08-816-977-24	٠.	981	7	•	0
17.	S-08-816-977-38	æ	066	12 301	0.30	0
18.	S-08-816-977-10	10, Application	1235	7	•	0
19.	S-08-816-977-42	, Appli	56	7	•	0
20.	S-08-816-977-3 S	, Ap	267	1	•	0
21.	S-08-816-977-22 Sequence	22, Applicatio	294		•	0
22.	S-08-816-977-7 S	, Applica	267	0		0
23.	S-08-816-977-26	6, Appli	294	0		0
24.	S-08-816-977-40	, Appli	26		•	0
25.	-08-816-977-18	Ca	56		-0.59	0
5 6.	8-08-816-977-15		59		•	0
27.	S-08-816-977-12	, Appli	29		•	0
28.	-816-977-44		32		-0.59	0
29.	S-08-816-97		25		-0.89	0
30.	-08-816-977-14		28		æ	0
31.	-977-28 S	28, Application	32			0
	**** 1 stan	dard deviation b	elow mean	****		
32.	08-816-977-41	 Appli 	56	1	٦.	0
	-08-816-977-29	29, Application	28	7 12	-1.19	0
	-08-816-077-13 c		cc		•	_

1. US-08-816-977-48' (1-2085) US-08-816-977-17 Sequence 17, Application US/08816977

3.27 22 Optimized Score = 22 Significance 88% Matches - 22 Mismatches 0 Conservative Substitutions Initial Score = Residue Identity = Gaps

12. US-08-816-977-48' (1-2085) US-08-816-977-16 Sequence 16, Application US/08816977

12 Optimized Score - 12 Significance - 0.30 41% Matches - 12 Mismatches - 17 0 Conservative Substitutions - 0 Initial Score Residue Identity Gaps

25. US-08-816-977-48' (1-2085)
US-08-816-977-18 'Sequence 18', Application US/08816977

```
-0.59
13
                                                                                                                                                                                                                                                  Initial Score 9 Optimized Score 13 Significance -0.59
Residue Identity 44% Matches 13 Mismatches 16
Gaps 0 Conservative Substitutions 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    9 Optimized Score = 17 Significance = -0.59
58% Matches = 17 Mismatches = 12
0 Conservative Substitutions = 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Initial Score 8 Optimized Score 14 Significance -0.89
Residue Identity 50% Matches 14 Mismatches 14
Gaps 0 Conservative Substitutions 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   7 Optimized Score - 11 Significance --1.19
37% Matches - 11 Mismatches - 18
0 Conservative Substitutions - 0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      1410 1420 1430 1440 1470 1450 1460 1470 GGTCATCGCTTTTGCGATGGAGTAATCGGTGTTCTGCGATGGAGTAATCGGTGCATTCATGTG
                                                                    9 Optimized Score - 13 Significance - 50% Matches - 13 Mismatches - 0 Conservative Substitutions -
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         10 20 30 x 40 50 TTATTACCCGTTGTATATAAAAACTGTGAACTTTCTGTTCAGAAACGCTGCAGCT
                                                                                                                                                                                            26. US-08-816-977-48' (1-2085)
US-08-816-977-15 Sequence 15, Application US/08816977
                                                                                                                                                                                                                                                                                                                                                                                                                                              27. US-08-816-977-48' (1-2085)
US-08-816-977-12 Sequence 12, Application US/08816377
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              30. US-08-816-977-48' (1-2085)
US-08-816-977-14'Sequence 14, Application US/08816977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        34. US-08-816-977-13 gequence 13, Application US/08816977
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Initial Score Residue Identity Gaps
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Initial Score Residue Identity Gaps
Initial Score -
Residue Identity -
Gaps -
```